

# 2024 Colorado Science and Engineering Fair

## Grand Awards Press Release

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### Junior Division Best of CSEF Project

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#### First Place

Finnley Reitz 6th grade  
*Sumac Shindig: An Investigation into Scarification*  
 Alta Vista Charter School Lamar

#### Second Place

Carson Stone 8th grade  
 Connor Stone 6th grade  
*Shake Rattle and Roll - Washboard Phenomenon: The Effect of Wheel Velocity on a Roadbed*  
 Brush Middle School Brush

#### Third Place

Cuinn Archer 8th grade  
*Automatic Water Vol. 2*  
 Mancos Middle School Mancos

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### Senior Division Best of CSEF Project

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#### First Place

Haydan Drullinger 10th grade  
*Is It Clogged? Productions of an Instrument to Detect Clogged Sprinkler Heads and Notify a Cellular Device*  
 Liberty School Joes

#### Second Place

Shrey Rohilla 11th grade  
*Waste to Watts: Converting Locally Sourced Organic Waste Material into Activated Carbon-Based Supercapacitors*  
 The Classical Academy Colorado Springs

#### Third Place

Naomi Kruse 10th grade  
*Paper for the Planet: Development of a Novel Paper Inoculated with Wildflower Seed and Carbon-Sequestering Fungi*  
 Schullandheim Home School Colorado Springs

#### Fourth Place

Lydia Mekelburg 11th grade  
*Spatial Analysis of Deer Populations in Northeastern Colorado*  
 Yuma High School Yuma

#### Fifth Place

Julia Gao & Om Vegesna 9th grade  
*G.L.O.W.: A Novel Hybrid Network Approach for Glioblastoma Localization Using Carcinogenic Oxidative Stress Biomarkers*  
 Fairview High School Boulder

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### Junior Division Animal Sciences

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#### First Place

Sienna Harden & Vivian Bozek 6th grade  
*We Got GOOD Milk!*  
 St. Joseph's Catholic School Fort Collins

#### Second Place

Vivian Wolkow 7th grade  
*Can Planaria Distinguish One Color from Another?*  
 North Middle School Colorado Springs

#### Third Place

Jessa Wilson 7th grade  
*Equine Heart Rate*  
 Wiggins Middle School Wiggins

#### Honorable Mention

Kellen McClure 6th grade  
*My Pogo Project*  
 Jefferson Intermediate School Rocky Ford

#### Honorable Mention

Priya Mayjoy 8th grade  
*Monitoring Apis Mellifera Linnaeus for Winter Survival*  
 Lamar Middle School Lamar

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### Senior Division Animal Sciences

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#### First Place

Lydia Mekelburg 11th grade  
*Spatial Analysis of Deer Populations in Northeastern Colorado*  
 Yuma High School Yuma

#### Second Place

Hansini Mudumala 11th grade  
 Aryana Havash 12th grade  
*The Effect of Microplastics on Neocaridina davidi*  
 SkyView Academy Highlands Ranch

#### Third Place

Maggie Anderson 10th grade  
*Analysis of Expected Progeny Difference: Predictability in Beef Cattle*  
 Yuma High School Yuma

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**Junior Division**  
**Behavioral & Social Sciences**

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**First Place**

Asha Jeter Patel 8th grade  
*Conversation Topics*  
Sacred Heart of Jesus Catholic School Boulder

**Second Place**

Zoe Smith 7th grade  
*Journey to the Center of the Mind*  
Loveland Classical School Loveland

**Third Place**

Zadira McGee 8th grade  
*The Effects of Stimulants and Depressants on the Heart Rate of Daphnia*  
Summit Middle Charter School Boulder

**Honorable Mention**

Juliet Huckabay 7th grade  
*The Influence of Persuasive Language on Long Term Memory*  
Skinner Middle School Denver

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**Senior Division**  
**Behavioral & Social Sciences**

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**First Place**

Kenedy Jiron-Baker 12th grade  
*Income and the Environment*  
Evergreen High School Evergreen

**Second Place**

Zoey Montoya 11th grade  
Everett Ediger 12th grade  
*Determining Prosodic Patterns in the Speech of Online Science Communication*  
La Junta Jr/Sr High School La Junta

**Third Place**

Alexander Zhang 11th grade  
*Multi-Layer Structural Equation Modeling of Behavioral Traits and Entrepreneurial Interest*  
Fairview High School Boulder

**Honorable Mention**

Ethan Wang, Vincentius Aaron Chen, &  
James Kerrane 12th grade  
*Liminal Spaces and the Uncanny Valley: An Interdisciplinary Virtual Reality and Psychology Experimental Research Design*  
Peak to Peak Charter School Lafayette

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**Junior Division**  
**Biomedical & Health Sciences**

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**First Place**

Kapil Bhandaram 8th grade  
*What Model Performs the Best When Using Artificial Intelligence to Detect Pneumonia Using Chest Radiographs*  
Campus Middle School Englewood

**Second Place**

Maya Rokhlenko & Olive Spohn 8th grade  
*All Boxed Up: The Effects of Prescription Eyewear on Peripheral Vertigo*  
Flagstaff Academy Longmont

**Third Place**

Vedanth Raju 6th grade  
*Curcuza: A Nanogel Antibiotic Using Neem and Turmeric Nanoparticles to Help Tackle Antibiotic Resistance - A Global Health Threat*  
Aurora Quest K-8 School Aurora

**Honorable Mention**

Jade Howell 8th grade  
*Inheriting Blood Types*  
Ignacio Middle School Ignacio

**Honorable Mention**

Devon Mahorney 8th grade  
*A Spoonful of Sugar*  
West Grand Middle School Kremmling

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**Senior Division**  
**Biomedical & Health Sciences**

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**First Place**

Julia Gao & Om Vesegna 9th grade  
*G.L.O.W.: A Novel Hybrid Network Approach for Glioblastoma Localization Using Carcinogenic Oxidative Stress Biomarkers*  
Fairview High School Boulder

**Second Place**

Ashley Acton 12th grade  
*The Effects of Caffeine on Stem Cells and Skeletal Muscle Regeneration*  
Fairview High School Boulder

**Third Place**

Vanya Lavu 11th grade  
*Healthy Gut! Healthy You!: Using *Dorocephala Dactyligera* as a Model to Treat Gastrointestinal and Psychological Disorder with Novel Regenerative Enzymes*  
The Classical Academy Colorado Springs

### Honorable Mention

Logan Futrell 9th grade  
*Stabilizing Sugars: The Impacts of Food Choice on Glucose Levels During Athletic Performance*  
Monte Vista High School Monte Vista

### Honorable Mention

Amy Xia 10th grade  
*Determining Whether the PTPN2 Gene Plays a Role in the Development of Type 1 Diabetes*  
Cherry Creek High School Greenwood Village

### Honorable Mention

Garrett Rymer 11th grade  
*Windlass Tourniquets: Using Medical Instructions to Prepare for Massive Hemorrhage*  
Cherry Creek High School Greenwood Village

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## Junior Division Chemistry

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### First Place

Sophia Bronstein 8th grade  
*The Vanishing Palette: Comparing the Fading Rates of Different Oil-Based Paints*  
Summit Middle Charter School Boulder

### Second Place

Tess Price 8th grade  
*Polymerization Using Alginate Spherification*  
Ken Caryl Middle School Littleton

### Third Place

Varun Velmurugan 8th grade  
*Water Purification: A Solution for Fluoride Contamination*  
Campus Middle School Englewood

### Honorable Mention

Marin Cantrell 8th grade  
*Toilet Talk*  
Cardinal Community Academy Keensburg

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## Senior Division Chemistry

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### First Place

Claire Huang 11th grade  
Sophia Zhang 10th grade  
*Natural Eutectogels as a Novel Material for Green Wearable Electronics*  
Fairview High School Boulder

### Second Place

Katherine Zheng 11th grade  
*Visible Light Photocatalytic Degradation of Congo Red Using LaFeO<sub>3</sub> Nanofibers*  
Fairview High School Boulder

### Third Place

Helena Borsholm & Charlotte Harrington 12th grade  
*Tuning the Concentration of Active Sites on the Surface of Heterogeneous Catalysts Using Self-Assembled Monolayers*  
Monarch High School Louisville

### Honorable Mention

Cole Randolph 12th grade  
*Calcium Carbonate Cooling Caps*  
Green Mountain High School Lakewood

### Honorable Mention

Mariami Zhuzhunashvili 12th grade  
*Producing Biodiesel from Spent Coffee Grounds: Traditional vs. In situ Transesterification*  
Cherry Creek High School Greenwood Village

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## Junior Division Earth & Environmental Sciences

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### First Place

Cameron Kempisty 7th grade  
*To Grow or Not to Grow: Testing Biomass-based Alternatives for a Greener World*  
Eagleview Middle School Colorado Springs

### Second Place

Elise Gavin 7th grade  
*Biodegradable or Not? Trial by Fire!*  
The Classical Academy Colorado Springs

### Third Place

Kaycee Clark 8th grade  
*What Lies Beneath: A Study on the Effects of Grazing Intensities on the Nutrients in the Soil*  
Wray Junior High School Wray

### Honorable Mention

Lucia Montello 6th grade  
*Snow Force: Testing Which Avalanche Control Method Is Most Effective*  
Eagleview Middle School Colorado Springs

### Honorable Mention

Colter Dennison 8th grade  
*Toxic Tributaries*  
Mancos Middle School Mancos

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## Senior Division Earth & Environmental Sciences

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### First Place

Zachariah Nagle 11th grade  
*Testing Pollution and Radioactivity Levels Near Suncor's Petrochemical Refinery in Commerce City, Colorado*  
Fairview High School Boulder

**Second Place**

Hannah Shelton 11th grade  
*Applied Mycology: Do Fungal Endophyte Communities Differ Between Western Spruce Budworm Infested Douglas Fir and Uninfested Douglas Fir?*  
 Centauri High School La Jara

**Third Place**

Elizabeth Vossler 11th grade  
*Detention Basin Systems: Mitigating Stormwater in Hampden Heights and Its Implications on Cherry Creek Water Quality*  
 Denver School of the Arts Denver

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**Junior Division  
 Energy**


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**First Place**

Rylen Ross 7th grade  
*Cooling for Solar*  
 Monte Vista Middle School Monte Vista

**Second Place**

Madison Kirchhoff 8th grade  
*Can I Break the Law of Conservation of Energy by Making a Magnetic Motor Run on Magnetic Potential Energy*  
 Craver Middle School Colorado City

**Third Place**

Paisley Wiersma 7th grade  
*Biomass to Biogas*  
 Genoa-Hugo School Hugo

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**Senior Division  
 Energy**


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**First Place**

Shrey Rohilla 11th grade  
*Waste to Watts: Converting Locally Sourced Organic Waste Material into Activated Carbon-Based Supercapacitors*  
 The Classical Academy Colorado Springs

**Second Place**

Natalie Muro 10th grade  
*Effects of Mooring Systems on Submerged Point Absorber Wave Energy Converters*  
 Palmer High School Colorado Springs

**Third Place**

Kelly Yang 11th grade  
*Enhancing Dry Cooling in Power Plants through High-Conductivity Thermal Ground Planes*  
 Fairview High School Boulder

**Honorable Mention**

Anna Kumar 12th grade  
*Glucose Fuel Cells Made from Graphene Membranes*  
 Fairview High School Boulder

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**Junior Division  
 Engineering**


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**First Place**

Cuinn Archer 8th grade  
*Automatic Water Vol. 2*  
 Mancos Middle School Mancos

**Second Place**

Vaughn Bankston 8th grade  
*Can You Truss-t the Truss?*  
 Mancos Middle School Mancos

**Third Place**

Laurel Amber Kent 6th grade  
*Cool Running: A Heat Stroke's Downfall - Using a Peltier Module to Prevent Heat Stroke*  
 Eagleview Middle School Colorado Springs

**Honorable Mention**

Junyao Yin 8th grade  
*Aerodynamics and Downforce: The Leading Edge in Formula One Racing*  
 Summit Middle Charter School Boulder

**Honorable Mention**

Tidus Overkill 8th grade  
*Cheap ROV*  
 Genoa-Hugo School Hugo

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**Senior Division  
 Engineering**


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**First Place**

Haydan Drullinger 10th grade  
*Is It Clogged? Productions of an Instrument to Detect Clogged Sprinkler Heads and Notify a Cellular Device*  
 Liberty School Joes

**Second Place**

Ersel Serdar 11th grade  
*Bending Fire: A New Approach to Steer Rockets Using Electric Fields*  
 Cherry Creek High School Greenwood Village

**Third Place**

Geo Raguraman 12th grade  
*InvisiEye 2.0: A Compact, Modernized Solution to Aid the Blind and Visually Impaired*  
 Discovery Canyon High School Colorado Springs

**Honorable Mention**

Denton Peil 12th grade  
*Gutter Guardian: Gutter Cleaning Drone*  
 Yuma High School Yuma

**Honorable Mention**

Kenneth Zittel 12th grade  
*Arc Drift*  
 Central High School Pueblo

**Honorable Mention**

Malcolm Smith 11th grade  
*Unfurl: A Physical Reservoir Computing Algorithm for Deploying Complex Origami Structures*  
 Niwot High School Niwot

**Junior Division  
 Environmental Engineering**

**First Place**

Anirudh Rao 6th grade  
*An Early Tornado Warning System*  
 STEM School Highlands Ranch

**Second Place**

Miles Stelzer 8th grade  
*Drone Fire Detection and Firefighting*  
 Summit Middle Charter School Boulder

**Third Place**

Andrew Kohler 8th grade  
*Blade Types and Quantity vs. Blade Efficiency for Wind Turbines*  
 Blessed Sacrament Catholic School Denver

**Honorable Mention**

Ripley Goode 8th grade  
*Wax: Not Cool Dude*  
 Boulder Country Day School Boulder

**Senior Division  
 Environmental Engineering**

**First Place**

Naomi Kruse 10th grade  
*Paper for the Planet: Development of a Novel Paper Inoculated with Wildflower Seed and Carbon-Sequestering Fungi*  
 Schullandheim Home School Colorado Springs

**Second Place**

Will Thompson & Dmitriy Kazantsev 12th grade  
*Sustainability That Grows on You*  
 Centaurus High School Lafayette

**Third Place**

Will Livingood 12th grade  
*Monitoring Utilities for Wildfire Containment and Prevention*  
 Green Mountain High School Lakewood

**Junior Division  
 Mathematics & Computer Sciences**

**First Place**

Ian Pfenning 8th grade  
*AI Powered Pet Feeder*  
 Flagstaff Academy Longmont

**Second Place**

Lucy Brittain 7th grade  
*Mosquito Bite: West Nile Fright*  
 Creede Schools Creede

**Third Place**

Ellery Kallal 8th grade  
*MisinformAtIon: How AI Can Create Realistic Misinformation That Humans Read as Fact*  
 Flagstaff Academy Longmont

**Senior Division  
 Mathematics & Computer Sciences**

**First Place**

Michael Gao 11th grade  
*ADMM-FBA: Novel High-Level, Robustly Convergent Flux Balance Analysis Using Dual Anderson-ADMM*  
 Fairview High School Boulder

**Second Place**

Stella Laird 11th grade  
*A Study of Numerical Machine Learning Approaches to Tennis Swing Analysis*  
 Fairview High School Boulder

**Third Place**

Elton Cao 12th grade  
*National Ground-Level NO2 Predictions Via Satellite Imagery Driven Hybrid Neural Networks*  
 Fairview High School Boulder

**Honorable Mention**

Maria Sears 11th grade  
*Help! I Need Somebody: An Assistive Device That Notifies Emergency Services Once a Fall Has Been Detected*  
 Monte Vista High School Monte Vista

**Honorable Mention**

Christina Abraham 11th grade  
*Optimizing Sustainable Fisheries with Machine Learning: Analyzing Ecosystem-friendly Fishing in the Coral Triangle*  
 Mountain Vista High School Highlands Ranch

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## Junior Division Micro & Molecular Biology

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### First Place

Espen Plotkin 8th grade  
*How Different Substances Effect the Zone of Inhibition of Bacteria*  
Vail Mountain School Vail

### Second Place

Rylie Harmon 7th grade  
*Safe to Drink?*  
Sargent Junior High School Monte Vista

### Third Place

Julia Muro 7th grade  
*The Effect of Various Vinegar Rinse Concentrations on the Shelf Life of Strawberries*  
North Middle School Colorado Springs

### Honorable Mention

Izzy Barter 8th grade  
*The Effect of Heat on Bacterial Evolution*  
Denver Jewish Day School Denver

### Honorable Mention

Bella Maze 8th grade  
*Warehouse Worries*  
Sargent Junior High School Monte Vista

### Honorable Mention

Ainsley Lehman & Jocelyn Demster 7th grade  
*Save Our Sandwiches*  
Firestone Charter Academy Firestone

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## Senior Division Micro & Molecular Biology

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### First Place

Angelina Wang 11th grade  
*Toxin-like Microproteins: A Novel Approach to Unveil the Intricacies of Acetylcholine Receptors*  
Fairview High School Boulder

### Second Place

Ayush Vispute 9th grade  
*ProteinFlow: A Novel Biocomputational Approach to Discovering Bacteria with Applications to Global Issues Using Protein Sequence*  
Rampart High School Colorado Springs

### Third Place

Armaan Gill 11th grade  
*Exploring the Antimicrobial Effects of Phenethyl Isothiocyanate*  
Lamar High School Lamar

## Honorable Mention

Kyra Jordan 12th grade  
*The Measurement of Expelled Zooxanthellae Using Sensor and Data Fusion to Predict Heat Waves*  
Golden High School Golden

## Honorable Mention

Zechariah Dilley 10th grade  
*The Effects of Potential Antibiotics Against Antibiotic Bacteria*  
South High School Pueblo

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## Junior Division Physics & Astronomy

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### First Place

Carson Stone 8th grade  
Connor Stone 6th grade  
*Shake Rattle and Roll - Washboard Phenomenon: The Effect of Wheel Velocity on a Roadbed*  
Brush Middle School Brush

### Second Place

Evelyn Lapp 7th grade  
*Refraction in Action*  
Brush Middle School Brush

### Third Place

Lane Mattive 7th grade  
*Just Wingin' It*  
Sargent Junior High School Monte Vista

### Honorable Mention

Brady Woods 6th grade  
*Getting Traction*  
Turner Middle School Berthoud

### Honorable Mention

Jacob Kossler 8th grade  
*Seeing Radiation To Find Out How To Block It*  
Turner Middle School Berthoud

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## Senior Division Physics & Astronomy

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### First Place

Tristan Cao 10th grade  
*Toward Realization of Novel Quantum Materials via Magneto-Synthesis*  
Stargate Charter School Thornton

### Second Place

Elsie Thompson 10th grade  
*Does Tee Height Affect Driving Distance?*  
Limon School Limon

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**Third Place**

Vikram Raju 9th grade  
*A Novel Way to Significantly Improve TEM Efficiency by  
Altering Hologram Interference*  
Cherry Creek High School Greenwood Village

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**Junior Division  
Plant Sciences**

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**First Place**

Finnley Reitz 6th grade  
*Sumac Shindig: An Investigation into Scarification*  
Alta Vista Charter School Lamar

**Second Place**

Elaina Consaul 7th grade  
*Boost the Roots!*  
Sargent Junior High School Monte Vista

**Third Place**

Jossilyn Wagar 8th grade  
*Rotten Project: How Effective Are Fungicides That  
Prevent Post-Harvest Potato Rot?*  
Sargent Junior High School Monte Vista

**Honorable Mention**

Gabe Carr & Jax Poss 7th grade  
*Does the Height of Grass Effect Its Growth?*  
Genoa-Hugo School Hugo

**Honorable Mention**

Andrew Dube 8th grade  
*The Effect of Acidification on the Health of Elodea*  
Aspen Middle School Aspen

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**Senior Division  
Plant Sciences**

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**First Place**

Jordan Rockey 12th grade  
*Effectiveness of Insect Management Practices on the  
Spread of Potato Virus Y*  
Monte Vista High School Monte Vista

**Second Place**

Siena Parr 11th grade  
*The Effect of Gray Water on Soil Composition and  
Growth of Phaseolus coccineus*  
Dolores High School Dolores

**Third Place**

Amanda Castillo-Lopez & Caitlin Dong 12th grade  
*Biodegradation by Pleurotus Ostreatus*  
Cherry Creek High School Greenwood Village

**Honorable Mention**

Jann Angelli Bacolod 12th grade  
*Wi-Fry: Detrimental Impacts of Wi-Fi Router Radiation  
on Crop Seed Viability and Vigor*  
Rocky Ford Jr/Sr High School Rocky Ford

**Honorable Mention**

Jaden DePue 9th grade  
*Roots of Success: Investigating the Optimal Water  
Conditions for Corn Root Growth*  
Wray High School Wray

# 2024 Colorado Science and Engineering Fair

## Special Awards Press Release

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### Colorado Science & Engineering Fair

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#### *Poster Art Contest*

Amy Xia 10th grade  
 \$100, certificate  
 Cherry Creek High School Greenwood Village

#### *Student Choice Award*

Julia Muro 7th grade  
 \$100, certificate  
 North Middle School Colorado Springs  
*The Effect of Various Vinegar Rinse Concentrations on the Shelf Life of Strawberries*

Amy Zhang 9th grade  
 \$100, certificate  
 Lakewood High School Lakewood  
*Feel the Ball: Convert Ball Motion to Touch for Sport Audiences with Vision/Hearing Impairments*

#### *Elemer Bernath Memorial Technical Writing Award*

Sophia Bronstein 8th grade  
 certificate  
 Summit Middle Charter School Boulder  
*The Vanishing Palette: Comparing the Fading Rates of Different Oil-Based Paints*

Kaycee Clark 8th grade  
 \$100, certificate  
 Wray Junior High School Wray  
*What Lies Beneath: A Study on the Effects of Grazing Intensities on the Nutrients in the Soil*

#### *Ralph Desch Memorial Technical Writing Award*

Kelly Yang 11th grade  
 certificate  
 Fairview High School Boulder  
*Enhancing Dry Cooling in Power Plants through High-Conductivity Thermal Ground Planes*

Elton Cao 12th grade  
 certificate  
 Fairview High School Boulder  
*National Ground-Level NO<sub>2</sub> Predictions Via Satellite Imagery Driven Hybrid Neural Networks*

Julia Gao 9th grade  
 Om Vegesna 9th grade  
 \$100, certificate  
 Fairview High School Boulder  
*G.L.O.W.: A Novel Hybrid Network Approach for Glioblastoma Localization Using Carcinogenic Oxidative Stress Biomarkers*

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### Pioneers of Science

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#### *Dian Fossey Animal Sciences Award*

Natalia Romero 7th grade  
 \$50, certificate  
 Justice & Heritage Academy Antonito  
*Attachment Issues*

#### *Mary Ainsworth Behavioral & Social Sciences Award*

Asha Jeter Patel 8th grade  
 \$50, certificate, poster of pioneer scientist  
 Sacred Heart of Jesus Catholic School Boulder  
*Conversation Topics*

#### *Leon Festinger Behavioral & Social Sciences Award*

Omar Manshad 6th grade  
 \$50, certificate, poster of pioneer scientist  
 West Ridge Academy Greeley  
*Beyond Pegs & Holes: Building an Improved Chessboard for Blind and Low Vision Chess Players*

#### *Elizabeth Helen Blackburn Biomedical & Health Sciences Award*

Sunand Bhandaram 8th grade  
 \$50, certificate  
 Campus Middle School Englewood  
*Artificial Intelligence Assisted Deployment of Emergency Resources for Natural Disasters*

#### *John Goodenough Chemistry Award*

Fallyn Gregersen 7th grade  
 \$50, certificate, poster of pioneer scientist  
 Wiggins Middle School Wiggins  
*Purifying Water with Activated Charcoal*

#### *Wangari Muta Maathai Earth & Environmental Sciences Award*

Tejas Raman 8th grade  
 \$50, certificate, poster of pioneer scientist  
 Boulder Country Day School Boulder  
*Pattern-Based Seismology*

#### *Burt Ratan Energy Award*

Neave Henschel 6th grade  
 \$50, certificate, poster of pioneer scientist  
 Hi-Plains School Seibert  
*Hold the Heat*



### *Steven Chu Engineering Award*

Morgan Drullinger 7th grade  
\$50, certificate, poster of pioneer scientist  
Liberty School Joes  
*Comparing the Accuracy of 3D Printed Airsoft BB's*

### *George Tchobanoglous Environmental Engineering Award*

Ripley Goode 8th grade  
\$50, certificate, poster of pioneer scientist  
Boulder Country Day School Boulder  
*Wax: Not Cool Dude*

### *Jack Kilby Mathematics & Computer Sciences Award*

Ian Pfenning 8th grade  
\$50, certificate, poster of pioneer scientist  
Flagstaff Academy Longmont  
*AI Powered Pet Feeder*

### *James Patrick Allison Micro & Molecular Biology Award*

Cynthia Stevens 8th grade  
\$50, certificate, poster of pioneer scientist  
Risley International Academy of Innovation Pueblo  
*Mouthwash vs. Bacteria*

### *Donna Theo Strickland Physics & Astronomy Award*

Emmett Wiedenheft 6th grade  
\$50, certificate, poster of pioneer scientist  
Southern Hills Middle School Boulder  
*The Change in Energy of Bouncing Balls*

### *Luther Burbank Plant Sciences Award*

Gabriel Ferguson 6th grade  
\$50, certificate, poster of pioneer scientist  
Craver Middle School Colorado City  
*Thriving Waters*

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## **Military**

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### **United States Air Force Reserve Officer Training Corps** *Air Force ROTC Award*

MaKenna McCoy 6th grade  
certificate, sling pack, power bank, USB flash memory drive, USB car charger  
Alta Vista Charter School Lamar  
*A Safer Landing*

Quinlan Childs 8th grade  
certificate, sling pack, power bank, USB flash memory drive, USB car charger  
Summit Middle Charter School Boulder  
*Dynamics of Flight: Testing Airplane Wings to Demonstrate Efficiency Using a Wind Tunnel*

Emilio Martinez 11th grade  
certificate, sling pack, power bank, USB flash memory drive, USB car charger  
Alamosa High School Alamosa  
*F.A.L.L. (Falling Avionic Light Landing): Analysis of Control Surfaces Upon Atmospheric Re-entry*

Tynan Lohman 8th grade  
certificate, sling pack, power bank, USB flash memory drive, USB car charger  
Liberty School Joes  
*Stealth Aircraft Aerodynamics*

### **United States Navy & Marine Corps** *Navy Science & Engineering Award*

Laurel Amber Kent 6th grade  
certificate, letter of congratulations, ONR medallion  
Eagleview Middle School Colorado Springs  
*Cool Running: A Heat Stroke's Downfall - Using a Peltier Module to Prevent Heat Stroke*

Anirudh Rao 6th grade  
certificate, letter of congratulations, ONR medallion  
STEM School Highlands Ranch  
*An Early Tornado Warning System*

Cuinn Archer 8th grade  
certificate, letter of congratulations, ONR medallion  
Mancos Middle School Mancos  
*Automatic Water Vol. 2*

Junyao Yin 8th grade  
certificate, letter of congratulations, ONR medallion  
Summit Middle Charter School Boulder  
*Aerodynamics and Downforce: The Leading Edge in Formula One Racing*

Ersel Serdar 11th grade  
certificate, letter of congratulations, ONR medallion, \$75 gift card  
Cherry Creek High School Greenwood Village  
*Bending Fire: A New Approach to Steer Rockets Using Electric Fields*

Haydan Drullinger 10th grade  
certificate, letter of congratulations, ONR medallion, \$75 gift card  
Liberty School Joes  
*Is It Clogged? Productions of an Instrument to Detect Clogged Sprinkler Heads and Notify a Cellular Device*

Emilio Martinez 11th grade  
certificate, letter of congratulations, ONR medallion,  
\$75 gift card  
Alamosa High School Alamosa  
*F.A.L.L. (Falling Avionic Light Landing): Analysis of  
Control Surfaces Upon Atmospheric Re-entry*

Tess Price 8th grade  
certificate, \$200  
Ken Caryl Middle School Littleton  
*Polymerization Using Alginate Spherification*

Mariami Zhuzhunashvili 12th grade  
certificate, \$150  
Cherry Creek High School Greenwood Village  
*Producing Biodiesel from Spent Coffee Grounds:  
Traditional vs. In situ Transesterification*

Anna Kumar 12th grade  
certificate, \$200  
Fairview High School Boulder  
*Glucose Fuel Cells Made from Graphene Membranes*

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### Organizational

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#### **Air & Waste Management Association, Rocky Mountain States Section** *Air & Waste Management Award*

Paisley Wiersma 7th grade  
certificate, \$100  
Genoa-Hugo School Hugo  
*Biomass to Biogas*

Taelynn Rojas 8th grade  
certificate, \$200  
Liberty School Joes  
*Using Microbes to Solve the Microplastic Problem*

Shrey Rohilla 11th grade  
certificate, \$100  
The Classical Academy Colorado Springs  
*Waste to Watts: Converting Locally Sourced Organic  
Waste Material into Activated Carbon-Based  
Supercapacitors*

Elton Cao 12th grade  
certificate, \$200  
Fairview High School Boulder  
*National Ground-Level NO<sub>2</sub> Predictions Via Satellite  
Imagery Driven Hybrid Neural Networks*

#### **American Association of University Women** *AAUW Colorado Award for Women in STEM*

Samantha Goetz 7th grade  
certificate, \$250  
St. Peter's Catholic School Monument  
*Is There a Medication Bottle That Senior Citizens Can  
Open and Children Cannot?*

Amy Zhang 9th grade  
certificate, \$250  
Lakewood High School Lakewood  
*Feel the Ball: Convert Ball Motion to Touch for Sport  
Audiences with Vision/Hearing Impairments*

#### **American Institute of Chemical Engineers, Rocky Mountain Section** *Excellence in Chemical Engineering Award*

Fallyn Gregersen 7th grade  
certificate, \$150  
Wiggins Middle School Wiggins  
*Purifying Water with Activated Charcoal*

#### **American Statistical Association, Colorado/Wyoming Chapter** *David Young Memorial Award*

Cameron Kempisty 7th grade  
certificate, \$200, student membership in the ASA,  
acknowledgement at the chapter's spring meeting and on  
the chapter website  
Eagleview Middle School Colorado Springs  
*To Grow or Not to Grow: Testing Biomass-based  
Alternatives for a Greener World*

Julia Gao 9th grade  
Om Vegesna 9th grade  
certificate, \$200, student membership in the ASA,  
acknowledgement at the chapter's spring meeting and on  
the chapter website  
Fairview High School Boulder  
*G.L.O.W.: A Novel Hybrid Network Approach for  
Glioblastoma Localization Using Carcinogenic  
Oxidative Stress Biomarkers*

#### **American Vacuum Society, Rocky Mountain Chapter** *Excellence in Physical Sciences & Engineering Award*

Collin Richardson 7th grade  
certificate, \$100, matching award to teacher/sponsor  
Wiggins Middle School Wiggins  
*Which Fuel Is More Efficient?*

Fallyn Gregersen 7th grade  
certificate, \$200, matching award teacher/sponsor  
Wiggins Middle School Wiggins  
*Purifying Water with Activated Charcoal*

Helena Borsholm 12th grade  
Charlotte Harrington 12th grade  
certificate, \$100, matching award for teacher/sponsor  
Monarch High School Louisville  
*Tuning the Concentration of Active Sites on the Surface  
of Heterogeneous Catalysts Using Self-Assembled  
Monolayers*

Ersel Serdar 11th grade  
certificate, \$200, matching award for teacher/sponsor  
Cherry Creek High School Greenwood Village  
*Bending Fire: A New Approach to Steer Rockets Using  
Electric Fields*

### **ASM International**

#### *ASM Materials Education Foundation Award*

Kenneth Zittel 12th grade  
certificate, \$100  
Central High School Pueblo  
*Arc Drift*

Karissa Freund 8th grade  
certificate, \$150  
Stratton School Stratton  
*The Corrosion of Steel*

### **Broadcom Foundation**

#### *Broadcom Coding with Commitment Award*

Tejas Raman 8th grade  
certificate, \$250 gift certificate, Raspberry Pi Pico Kit  
Boulder Country Day School Boulder  
*Pattern-Based Seismology*

### **Colorado Biology Teachers Association**

#### *CBTA Best Biology Project Award*

Finnley Reitz 6th grade  
certificate, \$100  
Alta Vista Charter School Lamar  
*Sumac Shindig: An Investigation into Scarification*

Vedanth Raju 6th grade  
certificate, \$150  
Aurora Quest K-8 School Aurora  
*Curcuza: A Nanogel Antibiotic Using Neem and Turmeric  
Nanoparticles to Help Tackle Antibiotic Resistance - A  
Global Health Threat*

Elizabeth Vossler 11th grade  
certificate, \$150  
Denver School of the Arts Denver  
*Detention Basin Systems: Mitigating Stormwater in  
Hampden Heights and Its Implications on Cherry Creek  
Water Quality*

Amy Xia 10th grade  
certificate, \$200  
Cherry Creek High School Greenwood Village  
*Determining Whether the PTPN2 Gene Plays a Role in  
the Development of Type 1 Diabetes*

### **Colorado BioScience Institute**

#### *Future of Life Sciences Award*

Jade Howell 8th grade  
certificate, \$25  
Ignacio Middle School Ignacio  
*Inheriting Blood Types*

Angelina Wang 11th grade  
certificate, \$75, feature in the Institute's "Success  
Stories"  
Fairview High School Boulder  
*Toxin-like Microproteins: A Novel Approach to Unveil  
the Intricacies of Acetylcholine Receptors*

### **Colorado Chemistry Teachers Association**

#### *CCTA Chemistry Award*

Reuben Friedlander 7th grade  
certificate, \$150  
Denver Jewish Day School Denver  
*Endothermic Chemical Reaction to Make a Colder More  
Efficient and Affordable Ice Pack Making a Better More  
Efficient and Cheaper Cold Pack*

Cole Randolph 12th grade  
certificate, \$150  
Green Mountain High School Lakewood  
*Calcium Carbonate Cooling Caps*

### **Colorado Environmental Health Association**

#### *Environmental Health Award*

Tymbri Priestley 7th grade  
certificate, \$75  
Mancos Middle School Mancos  
*The Effects of Antibacterial Soap on Abilities to Kill  
Bacteria*

Kenedy Jiron-Baker 12th grade  
certificate, \$150, invitation to exhibit at the CEHA  
Annual  
Educational Conference (valued at \$400)  
Evergreen High School Evergreen  
*Income and the Environment*

### **Colorado Foundation for Agriculture**

#### *Jack Fenwick Award for Agricultural Science*

Maya Calle 8th grade  
certificate, \$50  
Aspen Middle School Aspen  
*How Nitrites Affect the Growth of Algae*

Jossilyn Wagar 8th grade  
certificate, \$50  
Sargent Junior High School Monte Vista  
*Rotten Project: How Effective Are Fungicides That  
Prevent Post-Harvest Potato Rot?*

Haydan Drullinger 10th grade  
certificate, \$50  
Liberty School Joes  
*Is It Clogged? Productions of an Instrument to Detect  
Clogged Sprinkler Heads and Notify a Cellular Device*

Maggie Anderson 10th grade  
certificate, \$50  
Yuma High School Yuma  
*Analysis of Expected Progeny Difference: Predictability  
in Beef Cattle*

**Colorado Medical Society**  
*CMS Education Foundation Award*

Maya Rokhlenko 8th grade  
Olive Spohn 8th grade  
certificate, \$100, invitation to the winners and their  
parents to exhibit at the CMS Annual Meeting and  
attend the Presidential Inaugural Dinner with a paid  
overnight stay  
Flagstaff Academy Longmont  
*All Boxed Up: The Effects of Prescription Eyewear on  
Peripheral Vertigo*

Ashley Acton 12th grade  
certificate, \$100, invitation to the winners and their  
parents to exhibit at the CMS Annual Meeting and  
attend the Presidential Inaugural Dinner with a paid  
overnight stay  
Fairview High School Boulder  
*The Effects of Caffeine on Stem Cells and Skeletal Muscle  
Regeneration*

**Colorado Mineral Society**  
*Best Earth Science-related Project*

Kendyl Osborn 6th grade  
certificate, mineral specimen, book, \$35  
La Junta Intermediate School La Junta  
*Shells to Cells*

**Colorado Mycological Society**  
*Excellence in Mycological Research Award*

Amanda Castillo-Lopez 12th grade  
Caitlin Dong 12th grade  
certificate, \$25, society membership, signed copy of  
Vera Evenson's "Rocky Mountain Mushrooms" book  
Cherry Creek High School Greenwood Village  
*Biodegradation by Pleurotus Ostreatus*

Naomi Kruse 10th grade  
certificate, \$50, society membership, signed copy of  
Vera Evenson's "Rocky Mountain Mushrooms" book  
Schullandheim Home School Colorado Springs  
*Paper for the Planet: Development of a Novel Paper  
Inoculated with Wildflower Seed and Carbon-  
Sequestering  
Fungi*

Hannah Shelton 11th grade  
certificate, \$100, society membership, signed copy of  
Vera Evenson's "Rocky Mountain Mushrooms" book  
Centauri High School La Jara  
*Applied Mycology: Do Fungal Endophyte Communities  
Differ Between Western Spruce Budworm Infested  
Douglas Fir and Uninfested Douglas Fir?*

**Colorado Native Plant Society**  
*Colorado Native Plant Society Award*

Finnley Reitz 6th grade  
certificate, \$100, 1-year membership to Colorado Native  
Plant Society, book on Colorado native plants  
Alta Vista Charter School Lamar  
*Sumac Shindig: An Investigation into Scarification*  
Jordan Rockey 12th grade  
certificate, \$200, 1-year membership to Colorado Native  
Plant Society, book on Colorado native plants  
Monte Vista High School Monte Vista  
*Effectiveness of Insect Management Practices on the  
Spread of Potato Virus Y*

**Colorado Section of the American Chemical  
Society**  
*ACS Chemistry Award*

Sophia Bronstein 8th grade  
certificate, \$50  
Summit Middle Charter School Boulder  
*The Vanishing Palette: Comparing the Fading Rates of  
Different Oil-Based Paints*

Marin Cantrell 8th grade  
certificate, \$50  
Cardinal Community Academy Keensburg  
*Toilet Talk*

Tess Price 8th grade  
certificate, \$75  
Ken Caryl Middle School Littleton  
*Polymerization Using Alginate Spherification*

Varun Velmurugan 8th grade  
certificate, \$125  
Campus Middle School Englewood  
*Water Purification: A Solution for Fluoride  
Contamination*

Tyson Montague 8th grade  
certificate, \$150  
Centauri Middle School La Jara  
*Orange Juice: The Sunshine in Your Cup*

Mariami Zhuzhunashvili 12th grade  
certificate, \$50  
Cherry Creek High School Greenwood Village  
*Producing Biodiesel from Spent Coffee Grounds:  
Traditional vs. In situ Transesterification*

Cole Randolph 12th grade  
certificate, \$75  
Green Mountain High School Lakewood  
*Calcium Carbonate Cooling Caps*

Katherine Zheng 11th grade  
certificate, \$125  
Fairview High School Boulder  
*Visible Light Photocatalytic Degradation of Congo Red  
Using LaFeO<sub>3</sub> Nanofibers*

Claire Huang 11th grade  
Sophia Zhang 10th grade  
certificate, \$300  
Fairview High School Boulder  
*Natural Eutectogels as a Novel Material for Green  
Wearable Electronics*

**Colorado State University  
College of Agricultural Sciences**

*Innovations in the Science of Agriculture Award*

Julia Muro 7th grade  
certificate, \$500  
North Middle School Colorado Springs  
*The Effect of Various Vinegar Rinse Concentrations on  
the Shelf Life of Strawberries*

Kendyl Osborn 6th grade  
certificate, \$500  
La Junta Intermediate School La Junta  
*Shells to Cells*

Asha Thompson 10th grade  
certificate, \$500  
Limon School Limon  
*Rain, Rain, Don't Go Away*

Jessa Book 10th grade  
certificate, \$500  
Miami-Yoder High School Rush  
*Strength of EMF Waves Radiating from High Powered  
Electric Lines*

Siena Parr 11th grade  
certificate, \$500  
Dolores High School Dolores  
*The Effect of Gray Water on Soil Composition and  
Growth of Phaseolus coccineus*

**Colorado State University  
Colorado Natural Heritage Program**

*Colorado Natural Heritage Program Conservation  
Award*

Jessie Stong 12th grade  
certificate, pint glass, Wetlands of Colorado guidebook  
Green Mountain High School Lakewood  
*Botanic Panic at Welchester Tree Grant Park*

**Colorado State University  
Department of Agricultural Biology**  
*Agricultural Biology Award*

Elaina Consaul 7th grade  
certificate, \$100  
Sargent Junior High School Monte Vista  
*Boost the Roots!*

Cameron Kempisty 7th grade  
certificate, \$100  
Eagleview Middle School Colorado Springs  
*To Grow or Not to Grow: Testing Biomass-based  
Alternatives for a Greener World*

Jordan Rockey 12th grade  
certificate, \$100  
Monte Vista High School Monte Vista  
*Effectiveness of Insect Management Practices on the  
Spread of Potato Virus Y*

Jaden DePue 9th grade  
certificate, \$100  
Wray High School Wray  
*Roots of Success: Investigating the Optimal Water  
Conditions for Corn Root Growth*

**Colorado State University  
Department of Chemistry**  
*Excellence in Chemistry Award*

Marin Cantrell 8th grade  
certificate, \$75  
Cardinal Community Academy Keensburg  
*Toilet Talk*

Eli Harrison 6th grade  
certificate, \$125  
Home School Erie  
*The Effect of the Amount of Sugar in Kombucha Leather*

Katelyn Marquez 10th grade  
certificate, \$75  
Miami-Yoder High School Rush  
*Effects of Acids on Alloy Metals of Costume Jewelry: A  
Way to Improve Appearance*

Helena Borsholm 12th grade  
Charlotte Harrington 12th grade  
certificate, \$125  
Monarch High School Louisville  
*Tuning the Concentration of Active Sites on the Surface  
of Heterogeneous Catalysts Using Self-Assembled  
Monolayers*

**Colorado State University  
Department of Horticulture & Landscape  
Architecture**

*Excellence in Horticulture Award*

Ashton Power 6th grade  
certificate, \$100

Heritage Heights Academy Aurora  
*The Impact of Stem Length and Humidity on  
Transpiration of Flowers*

Jossilyn Wagar 8th grade  
certificate, \$100

Sargent Junior High School Monte Vista  
*Rotten Project: How Effective Are Fungicides That  
Prevent Post-Harvest Potato Rot?*

Jordan Rockey 12th grade  
certificate, \$100

Monte Vista High School Monte Vista  
*Effectiveness of Insect Management Practices on the  
Spread of Potato Virus Y*

Jessie Stong 12th grade  
certificate, \$100

Green Mountain High School Lakewood  
*Botanic Panic at Welchester Tree Grant Park*

**Colorado State University, Energy Institute**  
*Excellence in Energy Achievement Award*

Natalie Muro 10th grade  
certificate, \$250

Palmer High School Colorado Springs  
*Effects of Mooring Systems on Submerged Point Absorber  
Wave Energy Converters*

**Colorado's Electric Cooperatives**  
*The Colorado EnergyWise Award*

Neave Henschel 6th grade  
certificate, \$75

Hi-Plains School Seibert  
*Hold the Heat*

Rylen Ross 7th grade  
certificate, \$175

Monte Vista Middle School Monte Vista  
*Cooling for Solar*

Natalie Muro 10th grade  
certificate, \$75

Palmer High School Colorado Springs  
*Effects of Mooring Systems on Submerged Point Absorber  
Wave Energy Converters*

Shrey Rohilla 11th grade  
certificate, &175

The Classical Academy Colorado Springs  
*Waste to Watts: Converting Locally Sourced Organic  
Waste Material into Activated Carbon-Based  
Supercapacitors*

**Colorado-Wyoming Society of American  
Foresters**

*Excellence in Forestry Award*

Miles Stelzer 8th grade  
certificate, \$200

Summit Middle Charter School Boulder  
*Drone Fire Detection and Firefighting*

Aspen Fisher 12th grade  
certificate, \$200

Evergreen High School Evergreen  
*Comparing Pygmy Nuthatch Population Size Between  
Thinned and Unthinned Forests*

**Department of Commerce Boulder Laboratories**  
*Award for Excellence in Science and Engineering*

Hannah McClintock 12th grade  
certificate, alternate for summer internship at the DOC  
labs in Boulder

Strasberg High School Strasburg  
*The Effects of Recycled Calcium Hydroxide on the  
Average Growth and Mortality Rate of an Ecosystem  
Affected by Ocean Acidification*

Elton Cao 12th grade  
certificate, summer internship offer at the DOC labs in  
Boulder

Fairview High School Boulder  
*National Ground-Level NO<sub>2</sub> Predictions Via Satellite  
Imagery Driven Hybrid Neural Networks*

**Gromko Family**

*Gerald Gromko Memorial Award*

Ersel Serdar 11th grade  
certificate, \$250

Cherry Creek High School Greenwood Village  
*Bending Fire: A New Approach to Steer Rockets Using  
Electric Fields*

**Institute of Electrical and Electronics Engineers  
High Plains Section**

*IEEE Award*

Anirudh Rao 6th grade  
certificate, \$125 Amazon gift card

STEM School Highlands Ranch  
*An Early Tornado Warning System*

Shrey Rohilla 11th grade  
certificate, \$175 Amazon gift card  
The Classical Academy Colorado Springs  
*Waste to Watts: Converting Locally Sourced Organic  
Waste Material into Activated Carbon-Based  
Supercapacitors*

**Little Shop of Physics**  
*Matthew McCausland Memorial Award*

Pake VanderLinden 6th grade  
certificate, science equipment/instruments  
West Grand Middle School Kremmling  
*Using Mechanical Advantage to Lift*

Ansley Martin 7th grade  
certificate, science equipment/instruments  
Challenge School Denver  
*Making a Leather Substitute Out of Kombucha SCOBY*

Madison Kirchhoff 8th grade  
certificate, science equipment/instruments  
Craver Middle School Colorado City  
*Can I Break the Law of Conservation of Energy by  
Making a Magnetic Motor Run on Magnetic Potential  
Energy*

Zachary Carr 10th grade  
certificate, science equipment/instruments  
Limon School Limon  
*The Simulation of Gravity Waves*

Teagan Archer 11th grade  
certificate, science equipment/instruments  
Mancos High School Mancos  
*The Perfect Pan II*

Natalie Muro 10th grade  
certificate, science equipment/instruments  
Palmer High School Colorado Springs  
*Effects of Mooring Systems on Submerged Point Absorber  
Wave Energy Converters*

**Lockheed Martin**  
*Lockheed Martin Aerospace Award*

Quinlan Childs 8th grade  
certificate, \$150  
Summit Middle Charter School Boulder  
*Dynamics of Flight: Testing Airplane Wings to  
Demonstrate Efficiency Using a Wind Tunnel*

Ersel Serdar 11th grade  
certificate, \$350  
Cherry Creek High School Greenwood Village  
*Bending Fire: A New Approach to Steer Rockets Using  
Electric Fields*

**Matt Hannifin - CO2/Greenhouse Gas Reduction**  
*CO2 & Greenhouse Gas Reduction Award*

Priya Mayjoy 8th grade  
certificate, \$50  
Lamar Middle School Lamar  
*Monitoring Apis Mellifera Linnaeus for Winter  
Survival*

Hayden Forst 7th grade  
certificate, \$100  
Dove Creek Middle School Dove Creek  
*How Does a Cow's Digestive System Work?*

Maggie Anderson 10th grade  
certificate, \$50  
Yuma High School Yuma  
*Analysis of Expected Progeny Difference:  
Predictability in Beef Cattle*

Robert Horner 10th grade  
certificate, \$100  
Monte Vista High School Monte Vista  
*Fin-Tastic Harmony: Aquaponics with Betta*

Kenedy Jiron-Baker 12th grade  
certificate, \$300  
Evergreen High School Evergreen  
*Income and the Environment*

Claire Seger 11th grade  
certificate, \$300  
Monte Vista High School Monte Vista  
*An Analysis of Spaceflight-Induced Osteopenia and  
Muscular Atrophy Over Extended Zero Gravity  
Missions*

Azucena Perez 6th grade  
certificate, \$50  
Lamar Middle School Lamar  
*Corrosion Conundrum*

Humza Asif Memon 6th grade  
certificate, \$100  
Crescent View Academy Aurora  
*From Batter to Biofuel: Exploring Microbial Magic*

Claire Huang 11th grade  
Sophia Zhang 10th grade  
certificate, \$50  
Fairview High School Boulder  
*Natural Eutectogels as a Novel Material for Green  
Wearable Electronics*

|   |                                 |   |                               |
|---|---------------------------------|---|-------------------------------|
| Mariami Zhuzhunashvili<br>certificate, \$100<br>Cherry Creek High School<br><i>Producing Biodiesel from Spent Coffee Grounds:<br/>Traditional vs. In situ Transesterification</i>                       | 12th grade<br>Greenwood Village | Christina Abraham<br>certificate, \$100<br>Mountain Vista High School<br><i>Optimizing Sustainable Fisheries with Machine<br/>Learning: Analyzing Ecosystem-friendly Fishing in<br/>the Coral Triangle</i>    | 11th grade<br>Highlands Ranch |
| Cameron Kempisty<br>certificate, \$150<br>Eagleview Middle School<br><i>To Grow or Not to Grow: Testing Biomass-based<br/>Alternatives for a Greener World</i>  | 7th grade<br>Colorado Springs   | Elton Cao<br>certificate, \$200<br>Fairview High School<br><i>National Ground-Level NO<sub>2</sub> Predictions Via<br/>Satellite Imagery Driven Hybrid Neural Networks</i>                                    | 12th grade<br>Boulder         |
| Miles Rutledge<br>certificate, \$150<br>Yuma High School<br><i>Comparison of Canola, Sunflower, Soybean and<br/>Used Fryer Biodiesels on Their Engine and Emission<br/>Properties</i>                   | 11th grade<br>Yuma              | Julia Muro<br>certificate, \$150<br>North Middle School<br><i>The Effect of Various Vinegar Rinse Concentrations<br/>on the Shelf Life of Strawberries</i>  | 7th grade<br>Colorado Springs |
| Paisley Wiersma<br>certificate, \$300<br>Genoa-Hugo School<br><i>Biomass to Biogas</i>  | 7th grade<br>Hugo               | Ayush Vispute<br>certificate, \$150<br>Rampart High School<br><i>ProteinFlow: A Novel Biocomputational Approach<br/>to Discovering Bacteria with Applications to Global<br/>Issues Using Protein Sequence</i> | 9th grade<br>Colorado Springs |
| Ansley Martin<br>certificate, \$150<br>Challenge School<br><i>Making a Leather Substitute Out of Kombucha<br/>SCOPY</i>   | 7th grade<br>Denver             | Sydney Curtis<br>certificate, \$150<br>Sargent Junior High School<br><i>Sail Your Ship to Positivity: A Comparison of Sail<br/>Shape and Material</i>   | 7th grade<br>Monte Vista      |
| Haydan Drullinger<br>certificate, \$50<br>Liberty School<br><i>Is It Clogged? Productions of an Instrument to<br/>Detect Clogged Sprinkler Heads and Notify a<br/>Cellular Device</i>                   | 10th grade<br>Joes              | Alexander Diener<br>certificate, \$150<br>Fairview High School<br><i>An Analysis of the Coronal Temperature Spike using<br/>Solar Spectroscopy</i>  | 11th grade<br>Boulder         |
| Ruolin Hai<br>certificate, \$100<br>Campion Academy<br><i>HarvestSpectra: An Enhanced Crop Spectral<br/>Analysis Using a Novel Vertical Take-off Fixed Wing<br/>Structure for Precision Agriculture</i> | 11th grade<br>Loveland          | Quorra Benally<br>certificate, \$50<br>Mancos Middle School<br><i>Bombs Away</i>  | 6th grade<br>Mancos           |
| Galileo Hannigan<br>certificate, \$100<br>Centaurus High School<br><i>Theat's So F.I.R.E.! The Forefront in Inferno<br/>Research Equipment</i>  | 12th grade<br>Lafayette         | Andrew Dube<br>certificate, \$100<br>Aspen Middle School<br><i>The Effect of Acidification on the Health of Elodea</i>  | 8th grade<br>Aspen            |
| Naomi Kruse<br>certificate, \$200<br>Schullandheim Home School<br><i>Paper for the Planet: Development of a Novel Paper<br/>Inoculated with Wildflower Seed and Carbon-<br/>Sequestering Fungi</i>      | 10th grade<br>Colorado Springs  | Jessie Stong<br>certificate, \$50<br>Green Mountain High School<br><i>Botanic Panic at Welchester Tree Grant Park</i>   | 12th grade<br>Lakewood        |



Abby Mirsky 12th grade  
Dylan Greco 12th grade  
Sasha Trask 12th grade  
certificate, \$100  
Centaurus High School Lafayette  
*Sustainable Synergy: The Greenhouse Revolution Towards Self Sufficiency*

**Morrow Family**  
*Dental & Forensics Award*

Kinleigh Hathorn 8th grade  
certificate, \$50  
Sargent Junior High School Monte Vista  
*Return from the Brink: The Effect of Slurry on the Natural Environment*

Varun Velmurugan 8th grade  
certificate, \$100  
Campus Middle School Englewood  
*Water Purification: A Solution for Fluoride Contamination*

Hayden Eubanks 10th grade  
certificate, \$50  
West Grand High School Kremmling  
*Real vs Fake Blood Splatter*

Destiny Cornelius 11th grade  
certificate, \$100  
Plainview School Sheridan Lake  
*Slobbers and Saliva*

**National Centers for Environmental Information**  
*NCEI Award for Scientific Achievement*

Lucia Montello 6th grade  
certificate, cash award from anonymous donor  
Eagleview Middle School Colorado Springs  
*Snow Force: Testing Which Avalanche Control Method Is Most Effective*

**National Security Agency**  
*NSA Special Award*

Anirudh Rao 6th grade  
certificate, 3D pen with stencils  
STEM School Highlands Ranch  
*An Early Tornado Warning System*

Ellery Kallal 8th grade  
certificate, wooden models  
Flagstaff Academy Longmont  
*MisinformAtIon: How AI Can Create Realistic Misinformation That Humans Read as Fact*

Bode Monahan 7th grade  
certificate, digital microscope with LCD display  
Liberty School Joes  
*Learning the Lie: Coding a Machine Learning Algorithm to Analyze Brain Activity for Lie Detection*

Natalie Muro 10th grade  
certificate, wooden models  
Palmer High School Colorado Springs  
*Effects of Mooring Systems on Submerged Point Absorber Wave Energy Converters*

Amy Zhang 9th grade  
certificate, AI puppy and digital microscope with LCD  
Lakewood High School Lakewood  
*Feel the Ball: Convert Ball Motion to Touch for Sport Audiences with Vision/Hearing Impairments*

Pablo Becerra 12th grade  
certificate, 3D printer  
Yuma High School Yuma  
*Use of Artificial Intelligence for Cancer Diagnosis*

**Platte River Power Authority**  
*PRPA Special Award for Energy Efficiency and Innovation*

Rylen Ross 7th grade  
certificate, \$200  
Monte Vista Middle School Monte Vista  
*Cooling for Solar*

Kelly Yang 11th grade  
certificate, \$300  
Fairview High School Boulder  
*Enhancing Dry Cooling in Power Plants through High-Conductivity Thermal Ground Planes*

*PRPA Special Award for Environmental Responsibility*

Benjamin Knight 6th grade  
certificate, \$200  
Corwin International Magnet School Pueblo  
*Keeping Cool: What Is the Best House Color to Save on Air Conditioning*

Alex Nuzzo 11th grade  
certificate, \$300  
South High School Pueblo  
*Which Windmill Blade Type Works Best?*

**Rocky Mountain Association of Geologists**  
*Excellence in Earth Science Award*

Ansley DePue 7th grade  
certificate, \$200  
Wray Junior High School Wray  
*Republican Ripples: Investigating Water of the Republican River*

Tejas Raman 8th grade  
certificate, \$400  
Boulder Country Day School Boulder  
*Pattern-Based Seismology*

Elizabeth Vossler 11th grade  
certificate, \$400  
Denver School of the Arts Denver  
*Detention Basin Systems: Mitigating Stormwater in  
Hampden Heights and Its Implications on Cherry Creek  
Water Quality*

**Rocky Mountain Water Environment  
Association**

*Water Research Award*

Marin Cantrell 8th grade  
certificate, \$50  
Cardinal Community Academy Keensburg  
*Toilet Talk*

Taelynn Rojas 8th grade  
certificate, \$75  
Liberty School Joes  
*Using Microbes to Solve the Microplastic Problem*

Augustus Miller 12th grade  
certificate, \$50  
Monte Vista High School Monte Vista  
*Synthesizing Cellulose Acetate-Polyurethane for the  
Removal of Heavy Metal Ions from Water via Adsorption*

Elizabeth Vossler 11th grade  
certificate, \$75  
Denver School of the Arts Denver  
*Detention Basin Systems: Mitigating Stormwater in  
Hampden Heights and Its Implications on Cherry Creek  
Water Quality*

**Science Toy Magic**

*Physics Classroom Demonstration Award*

Quinlan Childs 8th grade  
certificate, \$150  
Summit Middle Charter School Boulder  
*Dynamics of Flight: Testing Airplane Wings to  
Demonstrate Efficiency Using a Wind Tunnel*

Lucia Nuel 11th grade  
certificate, \$150  
Fairview High School Boulder  
*Using Entanglement Entropy to Make a Solid Substance  
Out of Staples*

**Society for Mining, Metallurgy, and Exploration  
Colorado Section**

*Award for Excellence in Mineral Science &  
Engineering*

Gwendolyn Hohl 8th grade  
plaque, \$200  
Genoa-Hugo School Hugo  
*Does pH Affect the Rate of Corrosion on Steel*

Ansley DePue 7th grade  
plaque, \$200  
Wray Junior High School Wray  
*Republican Ripples: Investigating Water of the  
Republican River*

Kinleigh Hathorn 8th grade  
plaque, \$200  
Sargent Junior High School Monte Vista  
*Return from the Brink: The Effect of Slurry on the Natural  
Environment*

Juakin Sawatzky 9th grade  
plaque, \$300  
Liberty School Joes  
*The Effects of the Run-Off from Mine Tailings on Daphnia  
Magna*

**Society of Manufacturing Engineers  
Colorado Chapter 354**

*Andy Keller Memorial Award*

Cuinn Archer 8th grade  
certificate, \$100, recognition by local chapter  
Mancos Middle School Mancos  
*Automatic Water Vol. 2*

Tidus Overkill 8th grade  
certificate, \$150, recognition by the local chapter  
Genoa-Hugo School Hugo  
*Cheap ROV*

Natalie Muro 10th grade  
certificate, \$200, recognition by the local chapter  
Palmer High School Colorado Springs  
*Effects of Mooring Systems on Submerged Point  
Absorber Wave Energy Converters*

**Society of Women Engineers  
Rocky Mountain Section**

*SWE Award*

Lucia Montello 6th grade  
certificate, \$75  
Eagleview Middle School Colorado Springs  
*Snow Force: Testing Which Avalanche Control Method Is  
Most Effective*

Laurel Amber Kent 6th grade  
certificate, \$100  
Eagleview Middle School Colorado Springs  
*Cool Running: A Heat Stroke's Downfall - Using a Peltier  
Module to Prevent Heat Stroke*

Maria Sears 11th grade  
certificate, \$75  
Monte Vista High School Monte Vista  
*Help! I Need Somebody: An Assistive Device That  
Notifies Emergency Services Once a Fall Has Been  
Detected*

Natalie Muro 10th grade  
certificate, \$100  
Palmer High School Colorado Springs  
*Effects of Mooring Systems on Submerged Point Absorber  
Wave Energy Converters*

**Soil & Water Conservation Society**  
*Natural Resource Conservation Award*

Cameron Kempisty 7th grade  
certificate, \$100  
Eagleview Middle School Colorado Springs  
*To Grow or Not to Grow: Testing Biomass-based  
Alternatives for a Greener World*

Valerie Goodland 12th grade  
certificate, \$100  
Monte Vista High School Monte Vista  
*Hidden Fragments: Isolating and Detecting  
Microplastics in Rivers and Municipal Water Supplies*

**State of Colorado: Division of Reclamation,  
Mining & Safety**  
*DRMS Outstanding Science Exhibit Award*

Colter Dennison 8th grade  
certificate, gift bag, \$100  
Mancos Middle School Mancos  
*Toxic Tributaries*

Augustus Miller 12th grade  
certificate, gift bag, \$100  
Monte Vista High School Monte Vista  
*Synthesizing Cellulose Acetate-Polyurethane for the  
Removal of Heavy Metal Ions from Water via Adsorption*

**STEMgirls, LLC**  
*STEMgirls Middle School Rising Star Award*

Layla Mitchell 7th grade  
certificate, \$100  
Mancos Middle School Mancos  
*Serving Under Pressure*

**The Sara Volz Family**  
*Best Contribution to Fundamental Science*

Michael Gao 11th grade  
certificate, \$300  
Fairview High School Boulder  
*ADMM-FBA: Novel High-Level, Robustly Convergent  
Flux Balance Analysis Using Dual Anderson-ADMM*

Angelina Wang 11th grade  
certificate, \$300  
Fairview High School Boulder  
*Toxin-like Microproteins: A Novel Approach to Unveil  
the Intricacies of Acetylcholine Receptors*

**The Warnock Family**  
*Warnock Family Award*

Ashley Acton 12th grade  
certificate, \$100  
Fairview High School Boulder  
*The Effects of Caffeine on Stem Cells and Skeletal Muscle  
Regeneration*

Tristan Cao 10th grade  
certificate, \$100  
Stargate Charter School Thornton  
*Toward Realization of Novel Quantum Materials via  
Magneto-Synthesis*

**Trout Unlimited**  
*Trout Unlimited River Conservation Award*

Anya Wieder 11th grade  
Taryn McDermid 12th grade  
certificate, \$75  
St. Vrain Valley Innovation Center Longmont  
*Application of eDNA and qPCR Techniques for Detecting  
Northern Redbelly Dace in Aquatic Environments*

Ansley DePue 7th grade  
certificate, \$125  
Wray Junior High School Wray  
*Republican Ripples: Investigating Water of the  
Republican River*

Colter Dennison 8th grade  
certificate, \$200  
Mancos Middle School Mancos  
*Toxic Tributaries*

**Wilkins Family**  
*Young Entrepreneur's Award*

Haydan Drullinger 10th grade  
certificate, \$750  
Liberty School Joes  
*Is It Clogged? Productions of an Instrument to Detect  
Clogged Sprinkler Heads and Notify a Cellular Device*

**Wojtaszek Family**  
*Paul Wojtaszek Award*

Maria Horn 12th grade  
certificate, \$500  
Yuma High School Yuma  
*Sorry, I Didn't See You: Testing the Effects of  
Photosensitive Medications on Crystallin Alpha to Study  
the Development of Cataracts*

**Zonta Club of Boulder County**  
*Amelia Earhart Award*

MaKenna McCoy 6th grade  
certificate, \$100  
Alta Vista Charter School Lamar  
*A Safer Landing*

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## Scholarships

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### Colorado School of Mines

#### *Colorado School of Mines CSEF Scholarships*

Vanya Lavu 11th grade certificate, \$1,000 scholarship, renewable for up to 3 additional years for use towards an undergraduate degree at CSM

The Classical Academy Colorado Springs  
*Healthy Gut! Healthy You!: Using Dorocephala Dactyligera as a Model to Treat Gastrointestinal and Psychological Disorder with Novel Regenerative Enzymes*

Katherine Zheng 11th grade certificate, \$1,000 scholarship, renewable for up to 3 additional years for use towards an undergraduate degree at CSM

Fairview High School Boulder  
*Visible Light Photocatalytic Degradation of Congo Red Using LaFeO<sub>3</sub> Nanofibers*

Zachariah Nagle 11th grade certificate, \$1,000 scholarship, renewable for up to 3 additional years for use towards an undergraduate degree at CSM

Fairview High School Boulder  
*Testing Pollution and Radioactivity Levels Near Suncor's Petrochemical Refinery in Commerce City, Colorado*

Shrey Rohilla 11th grade certificate, \$1,000 scholarship, renewable for up to 3 additional years for use towards an undergraduate degree at CSM

The Classical Academy Colorado Springs  
*Waste to Watts: Converting Locally Sourced Organic Waste Material into Activated Carbon-Based Supercapacitors*

Ersel Serdar 11th grade certificate, \$1,000 scholarship, renewable for up to 3 additional years for use towards an undergraduate degree at CSM

Cherry Creek High School Greenwood Village  
*Bending Fire: A New Approach to Steer Rockets Using Electric Fields*

Stella Laird 11th grade certificate, \$1,000 scholarship, renewable for up to 3 additional years for use towards an undergraduate degree at CSM

Fairview High School Boulder  
*A Study of Numerical Machine Learning Approaches to Tennis Swing Analysis*

Michael Gao 11th grade certificate, \$1,000 scholarship, renewable for up to 3 additional years for use towards an undergraduate degree at CSM

Fairview High School Boulder  
*ADMM-FBA: Novel High-Level, Robustly Convergent Flux Balance Analysis Using Dual Anderson-ADMM*

Claire Huang 11th grade certificate, \$1,000 scholarship, renewable for up to 3 additional years for use towards an undergraduate degree at CSM

Fairview High School Boulder  
*Natural Eutectogels as a Novel Material for Green Wearable Electronics*

### Colorado State University

#### College of Agricultural Sciences

#### *Excellence in Agricultural Innovation Scholarship*

Maggie Anderson 10th grade certificate, \$1,000 scholarship for the 1st semester of attendance at CSU while enrolled in a College of Ag Sciences major

Yuma High School Yuma  
*Analysis of Expected Progeny Difference: Predictability in Beef Cattle*

Jordan Rockey 12th grade certificate, \$1,000 scholarship for the 1st semester of attendance at CSU while enrolled in a College of Ag Sciences major

Monte Vista High School Monte Vista  
*Effectiveness of Insect Management Practices on the Spread of Potato Virus Y*

### Matt Hannifin

#### *Reduction of CO<sub>2</sub> & Greenhouse Gases Scholarship*

Alexander Diener 11th grade certificate, \$5,000 non-renewable scholarship  
Fairview High School Boulder  
*An Analysis of the Coronal Temperature Spike using Solar Spectroscopy*

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## Society

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### American Psychological Association

#### *APA Achievement in Research in Psychological Science Award*

Samantha Goetz 7th grade certificate, 1-year affiliate student membership in the APA

St. Peter's Catholic School Monument  
*Is There a Medication Bottle That Senior Citizens Can Open and Children Cannot?*

Madelynn Sellers 9th grade  
certificate, 1-year affiliate student membership in the  
APA  
Green Mountain High School Lakewood  
*How Does How Much Sleep You Get Affect Your Short  
Term Memory?*

**Association for Women Geoscientists**  
*AWG Excellence in the Geosciences Award*

Taelynn Rojas 8th grade  
certificate, honorary AWG membership  
Liberty School Joes  
*Using Microbes to Solve the Microplastic Problem*

Ria Rajasekharan 9th grade  
certificate, honorary AWG membership  
Fossil Ridge High School Fort Collins  
*Anthropogenic Impacts on Rainfall: A Data Science  
Approach*

**Lemelson Foundation**  
*Lemelson Early Inventor Prize*

Parker Mitchell 8th grade  
\$100 (response required from winner to process),  
certificate  
Sargent Junior High School Monte Vista  
*Lure Launcher*

**NASA**  
*NASA Earth System Science Award*

Madison Kirchhoff 8th grade  
certificate  
Craver Middle School Colorado City  
*Can I Break the Law of Conservation of Energy by  
Making a Magnetic Motor Run on Magnetic Potential  
Energy*

Claire Seger 11th grade  
certificate  
Monte Vista High School Monte Vista  
*An Analysis of Spaceflight-Induced Osteopenia and  
Muscular Atrophy Over Extended Zero Gravity Missions*

**National Oceanic and Atmospheric  
Administration**  
*Taking the Pulse of the Planet Award*

Taelynn Rojas 8th grade  
certificate  
Liberty School Joes  
*Using Microbes to Solve the Microplastic Problem*

Ria Rajasekharan 9th grade  
certificate  
Fossil Ridge High School Fort Collins  
*Anthropogenic Impacts on Rainfall: A Data Science  
Approach*

**Regeneron**  
*Regeneron Biomedical Science Award*

Naomi Kruse 10th grade  
certificate, \$375 (response required from winner to  
process payment)  
Schullandheim Home School Colorado Springs  
*Paper for the Planet: Development of a Novel Paper  
Inoculated with Wildflower Seed and Carbon-  
Sequestering Fungi*

**Ricoh**  
*Ricoh Sustainable Development Award*

Cameron Kempisty 7th grade  
certificate  
Eagleview Middle School Colorado Springs  
*To Grow or Not to Grow: Testing Biomass-based  
Alternatives for a Greener World*

Abby Mirsky 12th grade  
Dylan Greco 12th grade  
Sasha Trask 12th grade  
certificate  
Centaurus High School Lafayette  
*Sustainable Synergy: The Greenhouse Revolution  
Towards Self Sufficiency*

**Society for In Vitro Biology**  
*Outstanding Achievement in In Vitro Biology Award*

Claire Seger 11th grade  
certificate, membership in the Society, recognition in  
Society's newsletter and on website  
Monte Vista High School Monte Vista  
*An Analysis of Spaceflight-Induced Osteopenia and  
Muscular Atrophy Over Extended Zero Gravity Missions*

Angelina Wang 11th grade  
certificate, membership in the Society, recognition in  
Society's newsletter and on website  
Fairview High School Boulder  
*Toxin-like Microproteins: A Novel Approach to Unveil  
the Intricacies of Acetylcholine Receptors*

**United States Agency for International  
Development**  
*USAID Science Champion Award*

Ayra Asif Memon 8th grade  
certificate, invitation to participate in a virtual  
conversation with USAID leaders in summer 2024  
Crescent View Academy Aurora  
*From Bioluminescence to Global Warming: Unveiling the  
Glow*

Valerie Goodland 12th grade  
certificate, invitation to participate in a virtual  
conversation with USAID leaders in summer 2024  
Monte Vista High School Monte Vista  
*Hidden Fragments: Isolating and Detecting  
Microplastics in Rivers and Municipal Water Supplies*

### **United States Metric Association**

#### *Outstanding Achievement in the Use of the International System Award*

Quinlan Childs 8th grade  
certificate, membership in the US Metric Association  
Summit Middle Charter School Boulder  
*Dynamics of Flight: Testing Airplane Wings to  
Demonstrate Efficiency Using a Wind Tunnel*

Jaden DePue 9th grade  
certificate, membership in the US Metric Association  
Wray High School Wray  
*Roots of Success: Investigating the Optimal Water  
Conditions for Corn Root Growth*

### **Yale Science & Engineering Association**

#### *Outstanding Achievement in Science & Engineering Award*

Ruolin Hai 11th grade  
certificate, E-book (response required from winner to be  
processed)  
Campion Academy Loveland  
*HarvestSpectra: An Enhanced Crop Spectral Analysis  
Using a Novel Vertical Take-off Fixed Wing Structure for  
Precision Agriculture*

### **Society for Science**

#### *Thermo Fisher Junior Innovators Challenge*

Sienna Harden 6th grade  
Vivian Bozek 6th grade  
certificate, nomination to enter the 2024 Junior  
Innovators Challenge (deadline is June 12, 2024)  
St. Joseph's Catholic School Fort Collins  
*We Got GOOD Milk!*

Asha Jeter Patel 8th grade  
certificate, nomination to enter the 2024 Junior  
Innovators Challenge (deadline is June 12, 2024)  
Sacred Heart of Jesus Catholic School Boulder  
*Conversation Topics*

Kapil Bhandaram 8th grade  
certificate, nomination to enter the 2024 Junior  
Innovators Challenge (deadline is June 12, 2024)  
Campus Middle School Englewood  
*What Model Performs the Best When Using Artificial  
Intelligence to Detect Pneumonia Using Chest  
Radiographs*

Sophia Bronstein 8th grade  
certificate, nomination to enter the 2024 Junior  
Innovators Challenge (deadline is June 12, 2024)  
Summit Middle Charter School Boulder  
*The Vanishing Palette: Comparing the Fading Rates of  
Different Oil-Based Paints*

Cameron Kempisty 7th grade  
certificate, nomination to enter the 2024 Junior  
Innovators Challenge (deadline is June 12, 2024)  
Eagleview Middle School Colorado Springs  
*To Grow or Not to Grow: Testing Biomass-based  
Alternatives for a Greener World*

Rylen Ross 7th grade  
certificate, nomination to enter the 2024 Junior  
Innovators Challenge (deadline is June 12, 2024)  
Monte Vista Middle School Monte Vista  
*Cooling for Solar*

Cuinn Archer 8th grade  
certificate, nomination to enter the 2024 Junior  
Innovators Challenge (deadline is June 12, 2024)  
Mancos Middle School Mancos  
*Automatic Water Vol. 2*

Anirudh Rao 6th grade  
certificate, nomination to enter the 2024 Junior  
Innovators Challenge (deadline is June 12, 2024)  
STEM School Highlands Ranch  
*An Early Tornado Warning System*

Ian Pfenning 8th grade  
certificate, nomination to enter the 2024 Junior  
Innovators Challenge (deadline is June 12, 2024)  
Flagstaff Academy Longmont  
*AI Powered Pet Feeder*

Espen Plotkin 8th grade  
certificate, nomination to enter the 2024 Junior  
Innovators Challenge (deadline is June 12, 2024)  
Vail Mountain School Vail  
*How Different Substances Effect the Zone of Inhibition of  
Bacteria*

Carson Stone 8th grade  
Connor Stone 6th grade  
certificate, nomination to enter the 2024 Junior  
Innovators Challenge (deadline is June 12, 2024)  
Brush Middle School Brush  
*Shake Rattle and Roll - Washboard Phenomenon: The  
Effect of Wheel Velocity on a Roadbed*

Finnley Reitz 6th grade  
certificate, nomination to enter the 2024 Junior  
Innovators Challenge (deadline is June 12, 2024)  
Alta Vista Charter School Lamar  
*Sumac Shindig: An Investigation into Scarification*

Vivian Wolkow 7th grade  
certificate, nomination to enter the 2024 Junior  
Innovators Challenge (deadline is June 12, 2024)  
North Middle School Colorado Springs  
*Can Planaria Distinguish One Color from Another?*

Zoe Smith 7th grade  
certificate, nomination to enter the 2024 Junior  
Innovators Challenge (deadline is June 12, 2024)  
Loveland Classical School Loveland  
*Journey to the Center of the Mind*

Maya Rokhlenko 8th grade  
Olive Spohn 8th grade  
certificate, nomination to enter the 2024 Junior  
Innovators Challenge (deadline is June 12, 2024)  
Flagstaff Academy Longmont  
*All Boxed Up: The Effects of Prescription Eyewear on  
Peripheral Vertigo*

Tess Price 8th grade  
certificate, nomination to enter the 2024 Junior  
Innovators Challenge (deadline is June 12, 2024)  
Ken Caryl Middle School Littleton  
*Polymerization Using Alginate Spherification*

Elise Gavin 7th grade  
certificate, nomination to enter the 2024 Junior  
Innovators Challenge (deadline is June 12, 2024)  
The Classical Academy Colorado Springs  
*Biodegradable or Not? Trial by Fire!*

Madison Kirchhoff 8th grade  
certificate, nomination to enter the 2024 Junior  
Innovators Challenge (deadline is June 12, 2024)  
Craver Middle School Colorado City  
*Can I Break the Law of Conservation of Energy by  
Making a Magnetic Motor Run on Magnetic Potential  
Energy*

Vaughn Bankston 8th grade  
certificate, nomination to enter the 2024 Junior  
Innovators Challenge (deadline is June 12, 2024)  
Mancos Middle School Mancos  
*Can You Truss-t the Truss?*

Miles Stelzer 8th grade  
certificate, nomination to enter the 2024 Junior  
Innovators Challenge (deadline is June 12, 2024)  
Summit Middle Charter School Boulder  
*Drone Fire Detection and Firefighting*

Lucy Brittain 7th grade  
certificate, nomination to enter the 2024 Junior  
Innovators Challenge (deadline is June 12, 2024)  
Creede Schools Creede  
*Mosquito Bite: West Nile Frignt*

Rylie Harmon 7th grade  
certificate, nomination to enter the 2024 Junior  
Innovators Challenge (deadline is June 12, 2024)  
Sargent Junior High School Monte Vista  
*Safe to Drink?*

Evelyn Lapp 7th grade  
certificate, nomination to enter the 2024 Junior  
Innovators Challenge (deadline is June 12, 2024)  
Brush Middle School Brush  
*Refraction in Action*

Elaina Consaul 7th grade  
certificate, nomination to enter the 2024 Junior  
Innovators Challenge (deadline is June 12, 2024)  
Sargent Junior High School Monte Vista  
*Boost the Roots!*

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### Teacher

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#### Colorado Association of Science Teachers *CAST Teacher Award*

Brady Archer  
certificate, \$150, one-year free membership in CAST  
Mancos Middle School Mancos

Loree' Harvey  
certificate, \$150, one-year free membership in CAST  
Monte Vista High School Monte Vista

#### Colorado Science & Engineering Fair *Doug Steward Memorial Teacher Award*

Allison Hellman  
certificate, \$275  
South High School Pueblo

Angie Grimes  
certificate, \$275  
Miami-Yoder School Rush

Brady Archer  
certificate, \$275  
Mancos Middle School Mancos

#### Lockheed Martin *CSEF Teacher of the Year Award*

Angie Grimes  
certificate, \$3,000 grant to the school to support student  
research facilitated by them and/or to fund programs in  
their district that would best enhance instruction in the  
sciences and engineering  
Miami-Yoder School Rush